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Taylor-Smith 14

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Taylor-Smith

Serial No.: 10/606,690

Filed: June 26, 2003

For: BRIDGED POLYSESQUIOXANE HOST
MATRICES CONTAINING
LANTHANIDES CHELATED BY
ORGANIC GUEST LIGANDS, AND
METHODS OF MAKING SUCH
MATRICES

Group: Not Yet Assigned

Examiner: Not Yet Assigned

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date set forth below:

Signed: 

Name: Karen S. Flynn

Date: September 26, 2003

Durham, North Carolina
September 26, 2003

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT UNDER § 197(a)

Sir:

This Information Disclosure Statement is being filed before a first Official Action has been mailed in this case.

Pursuant to 37 C.F.R. 1.56, 1.97 and 1.98, applicant's attorney wishes to bring to the attention of the Patent and Trademark Office the following items listed on the accompanying Forms PTO/SB/08A and PTO/SB/08B.

ITEMS

	<u>Patent No.</u>	<u>Publication Date</u>	<u>Patentee/Applicant</u>
1.	U.S. Patent No. 5,116,703	05/26/1992	Badesha et al.
2.	U.S. Patent No. 5,231,156	07/27/1993	Lin
3.	U.S. Patent No. 5,321,102	06/14/1994	Loy et al.
4.	U.S. Patent No. 5,384,376	01/24/1995	Tunney et al.
5.	U.S. Patent No. 5,412,043	05/02/1995	Novak et al.
6.	U.S. Patent No. 5,527,871	06/18/1996	Tani et al.
7.	U.S. Patent No. 5,719,976	02/17/1998	Henry et al.
8.	U.S. Patent No. 5,739,180	04/14/1998	Taylor-Smith
9.	U.S. Patent No. 5,965,202	10/12/1999	Taylor-Smith et al.
10.	U.S. Patent No. 6,184,968	02/06/2001	Taylor-Smith
11.	U.S. Patent No. 6,187,427	02/13/2001	Taylor-Smith et al.
12.	U.S. Patent No. 6,268,089	07/31/2001	Chandross et al.
13.	U.S. Patent No. 6,313,219	11/06/2001	Taylor-Smith

Other Publications

14. AINSLIE, A Review of the Fabrication and Properties of Erbium-Doped Fibers for Optical Amplifiers, Journal of Lightwave Technology, Feb. 1991, Page(s) 220-227, Volume 9, Number 2
15. CHOI ET AL., Amorphous Polysilsesquioxanes as a Confinement Matrix for Quantum-Sized Particle Growth: Size Analysis and Quantum Size Effect of CdS Particles Grown in Porous Polysilsesquioxanes, J. Phys. Chem., 1994, Page(s) 3207-3214, Volume 98, Number 12
16. CHOI ET AL., New Materials for Synthesis of Quantum-Sized Semiconductors and Transition-Metal Particles: Microporous Polysilsesquioxanes as a Confinement Matrix for Particle Growth, Chem. Mater., 1993, Page(s) 1067-1069, Volume 5, Number 8
17. CHOI ET AL., New Procedures for the Preparation of CdS and Heterogeneous Cr/CdS Phases in Hybrid Xerogel Matrices: Pore Structure Analysis and Characterization, J. Phys. Chem., 1995, Page(s) 4720-4732, Volume 99, Number 13

18. CHOI ET AL., Preparation of Nano-Sized Chromium Clusters and Intimate Mixtures of Chromium/CdS Phases in a Porous Hybrid Xerogel by an Internal Doping Method, *J. Am. Chem. Soc.*, 1994, Page(s) 9052-9060, Volume 116, Number 20
19. DEJNEKA ET AL., Rare-Earth-Doped Fibers for Telecommunications Applications, *MRS Bulletin*, Sept. 1999, Page(s) 39-45, Volume 24, Number 9
20. DUTTON, Optical Devices, Understanding Optical Communications, Page(s) 189-229
21. EMPEDOCLES ET AL., Photoluminescence Spectroscopy of Single CdSe Nanocrystallite Quantum Dots, *Physical Review Letters*, 10/28/1996, Page(s) 3873-3876, Volume 77, Number 18
22. GAPONTSEV ET AL., Erbium Glass Lasers and Their Applications, *Optics and Laser Technology*, Aug. 1982, Page(s) 189-196
23. HINES ET AL., Synthesis and Characterization of Strongly Luminescing ZnS-Capped CdSe Nanocrystals, *J. Phys. Chem.*, 1996, Page(s) 468-471, Volume 100, Number 2
24. KAGAN ET AL., Electronic Energy Transfer in CdSe Quantum Dot Solids, *Physical Review Letters*, 02/26/1996, Page(s) 1517-1520, Volume 76, Number 9
25. KIK ET AL., Erbium-Doped Optical-Waveguide Amplifiers on Silicon, *MRS Bulletin*, April 1998, Page(s) 48-54
26. KRISHNASWAMY ET AL., Optical Properties of Polymer Waveguides Dispensed on an Erbium/Ytterbium Codoped Glass, *IEEE Journal of Selected Topics in Quantum Electronics*, June 1996, Page(s) 373-377, Volume 2, Number 2
27. LOCHHEAD ET AL., Rare-Earth Clustering and Aluminum Codoping in Sol-Gel Silica: Investigation Using Europium(III) Fluorescence Spectroscopy, *Chem. Mater.*, 1995, Page(s) 572-577, Volume 7, Number 3
28. LOY ET AL., Sol-Gel Synthesis of Hybrid Organic-Inorganic Materials: Hexylene- and Phenylene-Bridged Polysiloxanes, *Chem. Mater.*, 1996, Page(s) 656-663, Volume 8, Number 3
29. MURRAY ET AL., Self-Organization of CdSe Nanocrystallites into Three-Dimensional Quantum Dot Superlattices, *Science*, 11/24/1995, Page(s) 1335-1338, Volume 270
30. STECKL ET AL., Photonic Applications of Rare-Earth-Doped Materials, *MRS Bulletin*, Sept. 1999, Page(s) 16-17, Volume 24, Number 9
31. TAYLOR-SMITH ET AL., Erbium-Doped Polysilsesquioxane Molecular Composite Systems, Proceedings of the American Chemical Society Division of Polymeric Materials: Science and Engineering, Aug. 2000, Page(s) 237-238, Volume 83, Publisher: American Chemical Society
32. URQUHART, Review of Rare Earth Doped Fibre Lasers and Amplifiers, *IEE Proceedings*, Dec. 1988, Page(s) 385-407, Volume 135, Pt. J, Number 6
33. ZYSKIND ET AL., Erbium-Doped Fiber Amplifiers and the Next Generation of Lightwave Systems, *AT&T Technical Journal*, Feb. 1992, Page(s) 53-62

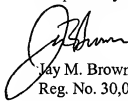
Additionally, applicant's attorney wishes to bring to the attention of the Patent and Trademark Office the following items not included nor listed on the accompanying Forms PTO/SB/08A and PTO/SB/08B, copies of which will be forwarded as soon as possible.

Other Publications

34. DESUVIRE, Physics Today, 1994, Page(s) 20+, Volume 47
35. DIGIOVANNI, Optical Waveguide Materials, Broer et al., eds., 1992, Publisher: Mater. Res. Soc. Proc., Pittsburgh, PA, Page(s) 135-142
36. HANNA, Solid State Lasers: New Developments and Applications, Inguscio et al., eds., 1993, Publisher: Plenum Press, New York, Page 231
37. LEE ET AL., J. Mater. Sci. Lett., 1994, Page(s) 615+, Volume 13
38. LOY ET AL., Chem. Rev., 1995, Page(s) 1431+, Volume 95
39. SANCHEZ ET AL., New J. Chem., 1994, Page(s) 1007+, Volume 18
40. STONE ET AL., Chem. Mater., 1997, Page(s) 2592+, Volume 9

The filing of this Information Disclosure Statement shall not be construed as a representation that a search has been made nor shall it be construed as an admission that the information cited is considered to be material to patentability, nor shall it be construed that no other material information exists.

Respectfully submitted,



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Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>		Complete if Known	
		Application Number	10/606,690
		Filing Date	09/26/2003
		First Named Inventor	Taylor-Smith
		Art Unit	
Sheet 2	of 3	Examiner Name	
		Attorney Docket Number	100.2490

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No.†	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue Number(s), publisher, city and/or country where published.	T ²
	14	AINSLIE, A Review of the Fabrication and Properties of Erbium-Doped Fibers for Optical Amplifiers, Journal of Lightwave Technology, Feb. 1991, Page(s) 220-227, Volume 9, Number 2	
	15	CHOI ET AL., Amorphous Polysilsesquioxanes as a Confinement Matrix for Quantum-Sized Particle Growth: Size Analysis and Quantum Size Effect of CdS Particles Grown in Porous Polysilsesquioxanes, J. Phys. Chem., 1994, Page(s) 3207-3214, Volume 98, Number 12	
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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Information for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>		Complete if Known	
		Application Number	10/606,690
		Filing Date	06/26/2003
		First Named Inventor	Taylor-Smith
		Art Unit	
		Examiner Name	
Sheet 3	of 3	Attorney Docket Number	100.2490

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue Number(s), publisher, city and/or country where published.	T ²
	25	KIK ET AL., Erbium-Doped Optical-Waveguide Amplifiers on Silicon, MRS Bulletin, April 1998, Page(s) 48-54	
	26	KRISHNASWAMY ET AL., Optical Properties of Polymer Waveguides Dispensed on an Erbium/Ytterbium Codoped Glass, IEEE Journal of Selected Topics in Quantum Electronics, June 1996, Page(s) 373-377, Volume 2, Number 2	
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